

## CLAIMS

1     1.    A device to absorb a force directed at an upright leg of a  
2           storage rack, comprising:  
3           a plurality of surfaces supported adjacent said upright leg;  
4           a fixed surface located a predetermined from said upright leg;  
5           resilient means movably supported intermediate said plurality  
6           of surfaces; and  
7           said fixed surface to permit said plurality of surfaces  
8           limited movement toward and away from said upright leg;  
9           whereby a force that is directed at said upright part is at  
10          least partially intercepted by said surfaces and at least  
11          partially absorbed by said resilient means.

1     2.    A device to absorb a force directed at an upright part of a  
2           structure, comprising:  
3           a plurality of surfaces supported adjacent said upright part;  
4           a fixed surface located a predetermined distance from said  
5           upright part; and  
6           resilient means supported intermediate said plurality of  
7           surfaces and said fixed surface to permit said plurality  
8           of surfaces movement relative to said upright part;  
9           whereby a force that is directed at said upright part is at  
10          partially intercepted by said surfaces and at least partially  
11          absorbed by said resilient means.

1     3.    A device to absorb a force directed at an upright part of a  
2           structure as described by claim 1 wherein said upright part is  
3           an upright support leg of a storage rack.

1     4.    A device to absorb a force directed at an upright part of a  
2           structure as described by claim 2 wherein said plurality of  
3           surfaces includes two, one located on each side of said  
4           upright part.

1     5.    A device to absorb a force directed at an upright part of a  
2           structure as described by claim 2 wherein said resilient means  
3           includes at least two coil springs.

1     6.    A device to absorb a force directed at an upright part of a  
2           structure as described by claim 2 wherein said plurality of  
3           surfaces each includes openings for attaching said device to  
4           said upright part.

1     7.    A force protector device to at least partially deflect and at  
2           least partially absorb a force directed at an upright support  
3           leg of a warehouse pallet rack structure, comprising:

4 two surfaces located in a spaced apart position to fit  
5 adjacent said upright leg, one surface on each side;  
6 a fixed surface located a predetermined distance from said  
7 upright leg welded at opposite ends to each of said two  
8 surfaces; and  
9 resilient spring means supported intermediate said fixed  
10 surface and said upright support leg to permit said of  
11 movement of said protector device relative to said  
12 upright leg to absorb at least part of said force;  
13 whereby a force that is directed at said upright part is  
14 intercepted by said surfaces and at least partially absorbed  
15 by said resilient means.

1 8. A force protector device to at least partially deflect and at  
2 least partially absorb a force directed at an upright support  
3 leg of a warehouse pallet rack structure as described by claim  
4 7 wherein said surface on each side of said upright support  
5 leg includes an opening for attaching said device to a pallet  
6 rack structure.

1 9. A force protector device to at least partially deflect and at  
2 least partially absorb a force directed at an upright support  
3 leg of a warehouse pallet rack structure as described by claim

4        7 wherein said surface on each side of said support leg has a  
5        bend toward each other terminating together a predetermined  
6        distance from said fixed surface.

1       10. A force protector device to at least partially deflect and at  
2       least partially absorb a force directed at an upright support  
3       leg of a warehouse pallet rack structure as described by claim  
4       9 wherein said bend that terminates together includes a panel  
5       fitted within said predetermined distance.

1       11. A force protector device to at least partially deflect and at  
2       least partially absorb a force directed at an upright support  
3       leg of a warehouse pallet rack structure as described by claim  
4       7 wherein said surface on each side of said upright support  
5       leg includes an opening for attaching said device to a pallet  
6       rack structure; said surface on each side has a bend toward  
7       each other terminating together; and a panel fitted between  
8       the bend together of said two surfaces and said fixed surface.